WISCONSIN STROKE PLAN 2005

Acute Treatment for Stroke

A. Introduction

Acute Treatment for Stroke: Ideal State
1. An inventory exists of hospitals in the state, along with their acute stroke treatment capabilities and limitations. This inventory is made available to primary care providers, EMS and the public. (Use JCAHO certified stroke center list to help develop this inventory.) Roles played by each type of hospital are identified as part of the inventory. *NOTE: The inventory should be completed by the collaborative or oversight body for stroke systems in the state.*
2. Strategies exist for hospitals that do not intend to seek stroke center status to ensure they have action plans to triage, treatment (or transport) stroke patients.
3. Roles played by each type of hospital within the system are identified and the responsibilities inherent in those roles defined.

Hospital certification, designation or licensure may be accomplished through a variety of organizations (e.g., non-profit companies, state health agencies, professional societies or JCAHO).

Hospitals with limited resources must develop plans to collaborate with nearby primary and/or comprehensive stroke centers, including formal transfer agreements. Primary and comprehensive stroke centers (i.e., hospitals with specialized resources and personnel available to provide stroke treatment and rehabilitation that surpass the resources expected of primary stroke centers) should accept responsibility for collaborating with other facilities in ways that promote patient access to appropriate care. Each hospital should take responsibility for meeting its obligations to the broader stroke system.

NOTE: It is not the role of the AHA/ASA to evaluate hospitals. AHA/ASA has partnered with JCAHO to create the Primary Stroke Center Certification program because JCAHO has the expertise needed to appropriately evaluate hospitals. Should your collaborative opt to survey hospitals that are not certified in order to attempt to assess their readiness, AHA/ASA teams are not advised to visit or evaluate hospital sites. Self-reported surveys may be used by the collaborative as one method to gather needed information.

B. Current Status

Please rate Wisconsin's current status on *Acute Stroke* (on a scale from 1 to 5, 1 being poor (does not exist) and 5 being "ideal" state:

Hospitals are identified with PSC or other status
Roles of all hospitals are defined
Resources are available for non-stroke centers

1. **__1.0___** An **inventory** exists of hospitals in the state along with their acute stroke treatment capabilities (hospitals are identified with PSC or other status).
2. **__1.0___ Strategies** exist for hospitals that do not intend to seek stroke center status to ensure they have action plans to triage, treatment (or transport) stroke patients.
3. **__1.0___ Roles** played by each type of hospital within the system are identified and the responsibilities inherent in those roles defined.
4. **__1.0___ Overall Score**

C. Inventory

Identify assets and resources available to assist with the above recommendations.

Inventory of Acute Stroke Assets/Resources	
Organization (Source)	**Asset/Resource (Identify/Describe)**
AHA/ASA	AHA/ASA website (americanheart.org) Ad Council campaign to drive awareness of acute stroke response Acute Stroke CME course (ECC) Acute Stroke Treatment Program Get With The Guidelines/Stroke Free Online NIH Stroke Scale Training Stroke: When Minutes Matter (senior education for acute stroke response) JCAHO Primary Stroke Center Certification program

Identify hospital status available to assist with above recommendations.

Acute Treatment for Stroke Wisconsin Hospital Inventory			
Hospital Name	**City**	**Certified Primary Stroke Center? (Y/N)**	**If no, what role does hospital play?**
Theda Clark Medical Center	Neenah	Y (JCAHO)	
St. Vincent's Hospital	Green Bay	Y (JCAHO)	
Froedtert Lutheran Memorial Hospital	Milwaukee	Y (JCAHO)	

D. Assessment for *Acute Stroke*

Recommendation 1: A stroke system should determine the acute stroke treatment capabilities and limitations of all hospitals and make these available to primary care providers, EMS and the public.

- Rated at 1.0 out of 5.

Recommendation 2: A stroke system must develop strategies that incorporate hospitals that do not intend to seek stroke center status. All hospitals and facilities that could be involved in the care of acute stroke patients should develop action plans for the triage and treatment (or transport) of stroke patients.

- Rated at 1.0 out of 5.

Recommendation 3: A stroke system should ensure that hospitals identified as acute stroke-capable possess the appropriate resources and deliver primary stroke care, as outlined in national recommendations, based on local or national certifying bodies.

- Rated at 1.0 out of 5.

Recommendation 5: A stroke system should identify the roles played by each type of hospital within the system and define the responsibilities inherent in those roles.

- Rated at 1.0 out of 5.

Notation: At the March meeting the panel agreed the following applied to the recommendations above.

- **Current situation:**
  - 3/102 (3%) acute care hospitals in Wisconsin are JCAHO stroke certified
  - 21/102 (20%) acute care hospitals have verbally expressed interest in JCAHO certification (increased from 9% to 20% since mid-Feb)
  - 49/102 (48%) hospitals self-reported their BAC Recommendation status in 03-04; data collection was face to face interviews conducted by AHA Health Initiatives Directors using the BAC Recommendations checklist; hospitals interviewed represent 78% of stroke admissions in WI (2002).
    - 13 of the 49 self-reporting hospitals indicated they met all 12 BAC Recommendations.
      - Of the 13 hospitals, 3 hospitals are now JCAHO certified and an additional 6 hospitals have indicated interest in becoming JCAHO certified – a total of 9 of the 13 are "leading the way".
      - The following scenarios apply to several of the 13 hospitals: in discussion with administration on JCAHO certification and part of a health system determining which hospital(s) in a local area will be the JCAHO certified hospital
    - Across the 49 hospitals the following percentage met each of the 12 BAC Recommendations:
      - 67% Acute stroke team
      - 86% Written protocols
      - 90% EMS agreement
      - 86% ER personnel trained
      - 88% Stroke unit
      - 92% Neurosurg services
      - 35% Stroke center dir
      - 94% Neuro-imaging services
      - 94% Lab services
      - 31% QI
      - 33% Continuing education
      - 67% Public programs

- Publication of PSC certified hospitals would need to be through a very public tool like a website (CVH Program site for example) and be accessible to hospitals and EMS providers.
    - Our goal is not to publish or publicly report "self-reported" hospital data captured from hospitals, one reason being potential lawsuits.
- What can be published eventually is a list of those hospitals certified by JACHO (and the more realistic timeframe may be 3+ years down the road). Hospitals certified by JACHO are available on the JCAHO website.
    - With few Wisconsin hospitals currently certified (3) and 21 reported as verbally expressing interest in JCAHO certification, publishing a list may be down the road 2 to 3+ years.

- **Improvement suggestions:**
    - Increasing the number of hospitals meeting PSC recommendations and becoming JCHAO certified; those hospitals not planning to meet PSC recommendations and becoming JCHAO certified need to have a plan for their role in the acute care system for stroke.
        - Promotion of the WSC and its purpose; promotion of *Recommendations for Stroke Systems of Care* and *BAC Recommendations*.
        - Training and education across hospitals to educate on PSC, JCAHO certification and *Recommendations for Stroke Systems of Care* to assist them in making informed decisions.
            - Promote a call to action message: It's time for hospitals to consider their strategic decision on their hospital's position in the stroke system of care, and accordingly undertake the needed infrastructure alignments to become a PSC and be certified -- or not.
            - For hospitals wishing to become PSC and certified, training and assistance on strengthening their infrastructure to become a PSC and certified.
            - For hospitals with few or no stroke admissions provide awareness of stroke systems of care developments and training and education to determine the hospital's role in the stroke system of care.

- **Obstacles/Barriers:**
    - This will take time – will not be accomplished in one or two years.
    - Information void on 53 non-surveyed hospitals relative to meeting BAC Recommendations and interest in JCAHO certification (2 of these 53 hospitals have expressed interest in JCAHO). (The possibility of a web-based survey to the DPH was mentioned)
    - Information void on triaging of patients; a lack of clear information about transfer agreements.

- **Critical success factors:**
    - A "critical mass" of PSC certified hospitals is needed before Wisconsin publication occurs.
    - Surveying hospitals in Wisconsin to address the information void.
    - Incorporating education recognizing the lack of knowledge in regions of the state.
    - Recognizing there are potentially two hospital segments to reach and developing different approaches for each:
        - *Hospitals not surveyed and not informed on PSC/JCAHO (the 53):* Education and training to hospitals to assist them in making informed decisions on their hospital's role in the stroke system of care.
        - *Hospitals surveyed and informed on PSC/JCAHO (the 49):* Assistance (education, training, seminars) for hospitals interested in strengthening infrastructure to become a PSC from JCAHO, involve presenters supporting BAC Recommendations and Stroke Systems of Care, tapping into hospitals who have completed this step (potentially the JCAHO certified hospitals).

Recommendation 4: A stroke system should ensure that clinical pathways are used consistently to ensure the organized application of interventions to prevent or limit stroke progression or secondary complications.

- Rated at 1.0 out of 5.

- **Current situation:**
    - Seen as a separate issue and will have separate solutions.
    - The question of clinical pathway would apply in any hospital, a rural hospital with limited resources versus a stroke center. Every hospital.
    - This is a concrete goal that we could meet -- and have a big impact to help facilitate that every hospital has access to tools like clinical pathways, and then we could promote what performance measures should be in your pathway. We could create a model for hospitals to apply.

- This is viewed as a very specific goal directed recommendation.
- Requests received by the AHA QII Director for clinical pathways – they just need more information and want examples.

- **Improvement suggestions:**
  - Make clinical pathways accessible on the Web
  - Promote what elements should be included in the pathway as a skeleton for hospitals to then apply in their own systems.
  - On the joint commission Web site are all of the clinical guidelines available to the public. We should promote. This will certainly help improve the recommendation. There is access to about 40 different articles and things for clinical guidelines that people could use when they're developing their clinical pathways. The references are right there.
  - Would it be possible to consolidate the main ideas from all those guidelines into one document?
    - I think sites do that differently whether they're doing orders or care plans.
    - Diane, do you have orders and care plans for your clinical pathways for stroke? Yes, there is a pathway and a separate standing order. We consider them a tool set, and I think question four could apply to that. Individual hospitals really have to cater their needs and can pick and choose the flavor they're going to use.
    - It's kind of a culture that the hospitals have to get the information and the standard of care. I think if we could provide them a template and where they find the clinical information, that's what we used.
  - Mary Jo: Model a work group after the guidelines for heart disease and stroke for the state of Wisconsin for clinics and health care practitioners.
    - "It took us about 20 months, but we pulled all the guidelines together. This is a different situation, I agree, and we came up with a two page laminated tool that we put on the Web and also mailed out to over 7500 practitioners. So if we could develop a tool or tool set, there is not reason we couldn't put it on the Web and mail it out."
    - Use this as a give-back for responses to survey.
  - Promote use of the ASA's Acute Stroke Treatment Program kit.
  - Make use of a website for example www.wisconsinstrokeprotocols. "We can *Wisconsin-ize* whatever we need to."

- **Obstacles/Barriers:**
  - One of the barriers in this item is common to all the other recommendations. How will we reach all the hospitals with this information and resource? How do we promote awareness of this among the state?
    - Answer: You put it on the Web to provide it for everyone.
  - The lack of guidelines in practice protocols.
    - "Unlike ACLS where basically providing everything cookbook for the physicians and staff, the stroke side of it, we really don't and I think we need to move more in that direction and make it easy for the hospitals, pull down practice guidelines and set orders if they chose to use them. If they want to go out and hybrid it to their facility and their practice structure, so be it. But I think we have to make it as easy for the hospitals as possible to adopt this approach."

E. Action Plan

Wisconsin Stroke Plan
Acute Stroke
2005-2007

Goal 1:	**Determine the acute stroke treatment capabilities and limitations of all hospitals and make these available to primary care providers, EMS and the public. (Use JCAHO certified stroke center list to help develop this inventory.)**

Strategy 1: **Encourage hospitals providing ED services to function as a primary stroke center or to rapidly transfer appropriate patients through the use of pre-negotiated inter-hospital protocols and transfer agreements and transport protocols.**

#	Objectives	Action Steps	Timeframe
1.1A	**Identify the capabilities and limitations of every Wisconsin hospital.**	• Develop and field a survey to capture the capabilities and limitations of every hospital. • Utilize BAC recommendations and JCAHO elements. • Explore the current reimbursement patterns for TPA treatment among state hospitals.	2005-2006
1.1B	**Establish a registry, index, or resource list to identify every Wisconsin hospital and its stroke service capabilities.**	• Identify every hospital in the state and its stroke service capabilities utilizing BAC recommendations and JCAHO elements. • For hospitals planning to become JCAHO/primary stroke centers post the elements they currently meet vs. must meet and periodically assess their status or progress. • For hospitals not planning to become primary stroke centers post their capabilities and limitations, date to have an action plan/steps in place for transfer and periodically assess status or progress on plan. • Define categories for hospitals such that "primary stroke centers will have the capability to implement x, y, z and non-stroke centers will have to implement x, y, z". • Promote knowledge of this index across the state to EMS and primary care.	2005-2007
1.1C	**Increase the number of hospitals meeting primary stroke recommendations and becoming JCAHO certified.**	• Continue to raise awareness and keep Wisconsin hospitals updated through the Wisconsin Stroke Committee on stroke developments underway. • Provide baseline education, training and resources (in-person, "webinars" or teleconferences) to Wisconsin hospitals on stroke systems, primary stroke centers and JCAHO certification. • Provide specific informational sessions on special topics (how to make infrastructure changes, process suggestions etc). • Provide web-based resources including conferences and links on the CVH Stroke web page.	2005-2007
1.1D & 2.1A	**Provide education and resources on options and action steps (triage and transfer) for hospitals that will not seek JCAHO certification as a primary stroke center.**	• Provide education, training and resources on options and action steps (triage and transfer) for hospitals that will not seek JCAHO certification as a primary stroke center. • Provide web-based resources including conferences and links on the CVH Stroke web page.	2005-2007
1.1E	**Educate EMS services about the identity of hospitals and the stroke registry (what hospitals are providing).**	• Develop a plan to educate EMS services.	2005-2007

Goal 2:	**Develop strategies that incorporate hospitals that do not intend to seek stroke center status. All hospitals and facilities that could be involved in the care of acute stroke patients should develop action plans for the triage and treatment (or transport) of stroke patients.**

Strategy 1: **Non-certified hospitals and other facilities should have pre-determined plans to collaborate with other facilities (e.g., via telemedicine or transport protocols) to ensure patients receive optimal stroke care.**

#	Objectives	Action Steps	Timeframe
2.1A	**Provide education and resources on options and action steps (triage and transfer) for hospitals that will not seek JCAHO certification as a primary stroke center.**	• Provide education, training and resources on options and action steps (triage and transfer) for hospitals that will not seek JCAHO certification as a primary stroke center. • Provide web-based resources including conferences and links on the CVH Stroke web page.	2005-2007

Goal 3: **Ensure that hospitals identified as "acute stroke capable" possess the appropriate resources and deliver primary stroke care in accordance with national recommendations and local or national certifying bodies.**

Strategy 1: **Ensure that only hospitals in Wisconsin certified by JCAHO for acute stroke are identified as "acute stroke capable".**

#	Objectives	Action Steps	Timeframe
3.1A	**Provide oversight/approval/confirmation of hospitals on the criteria indicated as meeting (a check and balance on self-reporting) and promote accuracy in qualifying hospital services.**	• Investigate and evaluate the option of providing oversight services (and other organizations that could) and developing categories of capabilities or levels for hospitals (note: these are not certification levels!) (e.g. Level 1: JCAHO certified, Level 2: Meets all criteria but not seeking JCAHO certification, Level 3: Treats stroke, meets most criteria but not all, Level 4: Treats stroke and has sufficient deficiencies regarding certification criteria, Level 5: Will not treat strokes, will divert. • Investigate and evaluate the option of possibly providing other certification options (the need for other certification process or state level certification process different than JCAHO); include in the investigation looking at what other states are doing (for example, Mass.) • Investigate the potential of having a reporting capability associated with the CVH Stroke website for hospitals to submit reports and documents for oversight capability. • Determine what hospitals would report.	2005-2007
3.1B	**Investigate potential for stroke legislation to support JCAHO primary stroke center certification for hospitals treating acute stroke patients.**	• Evaluate stroke legislative efforts across the country. • Provide a recommendation for Wisconsin.	2005-2007

Goal 4: **Ensure that clinical pathways are used consistently to ensure the organized application of interventions to prevent or limit stroke progression or secondary complications.**

Strategy 1: **Ensure that clinical pathways are based on protocols adapted to each institution reflecting well-established standards of care and national guidelines.**

#	Objectives	Action Steps	Timeframe
4.1A	**Educate hospitals about key performance measures to strive for in stroke care.**	• Adopt JCAHO performance measures for stroke care. • Determine additional key performance measures for stroke care and investigate the possibilities of incorporating into discharge data. • Create templates for clinical pathways that reflect the most current clinical practice guidelines.	2005-2007

		• Provide model pathways and tools and other related resources on the CVH Stroke website to meet those performance measures. • Promote the availability of resources to hospitals. • Provide training sessions. • Monitor the website for the most current and up to date information.	
4.1B	**Provide assistance to hospitals treating acute stroke patients to establish a QA process to continuously monitor the use and appropriateness of their pathways.**	• Educate institutions not using the quality process outlined by Joint Commission on the JCAHO quality process (outlines exactly what you need to be looking at, in process of being approved, is being piloted right now, they're indicators). • Develop resources and post to the CVH Stroke website. • Offer QA trainings.	2005-2007

Goal 5: Identify the roles played by each type of hospital in the system and define the responsibilities inherent in those roles.

Note: The panel determined that Goal 5 and the following strategies are accommodated in the previous goals, strategies and objectives.

Strategy 1: Ensure that hospitals with limited resources develop plans to collaborate with nearby primary or more comprehensive stroke centers (or both) including formal transfer agreements.

Strategy 2: Ensure that primary and comprehensive stroke centers are collaborating with other facilities in ways that promote patient access to appropriate care.

Strategy 2: Ensure that each hospital is taking responsibility for meeting its obligations to the broader stroke system.